



U. S. Coast Guard

Disaster Response



**Response
and
Recovery**



Agenda

Pre-storm Activities

First and Nationwide Response

Current Status

Impacts

Way Forward





Pre-Storm Activities

Command and Control

- Major command centers moved out of threat area
- Consistent with pre-established continuity of operations

Coast Guard – Federal First Responders (Assets and Crews)

- Survivability
- First Response aircraft moved to Shreveport and Lake Charles, LA, NAS Jacksonville, FL, Houston and Waco, TX.
- Ready for changes in storm direction
- Additional assets/crews from outside immediate area placed in standby

Station Gulfport Pre-Katrina

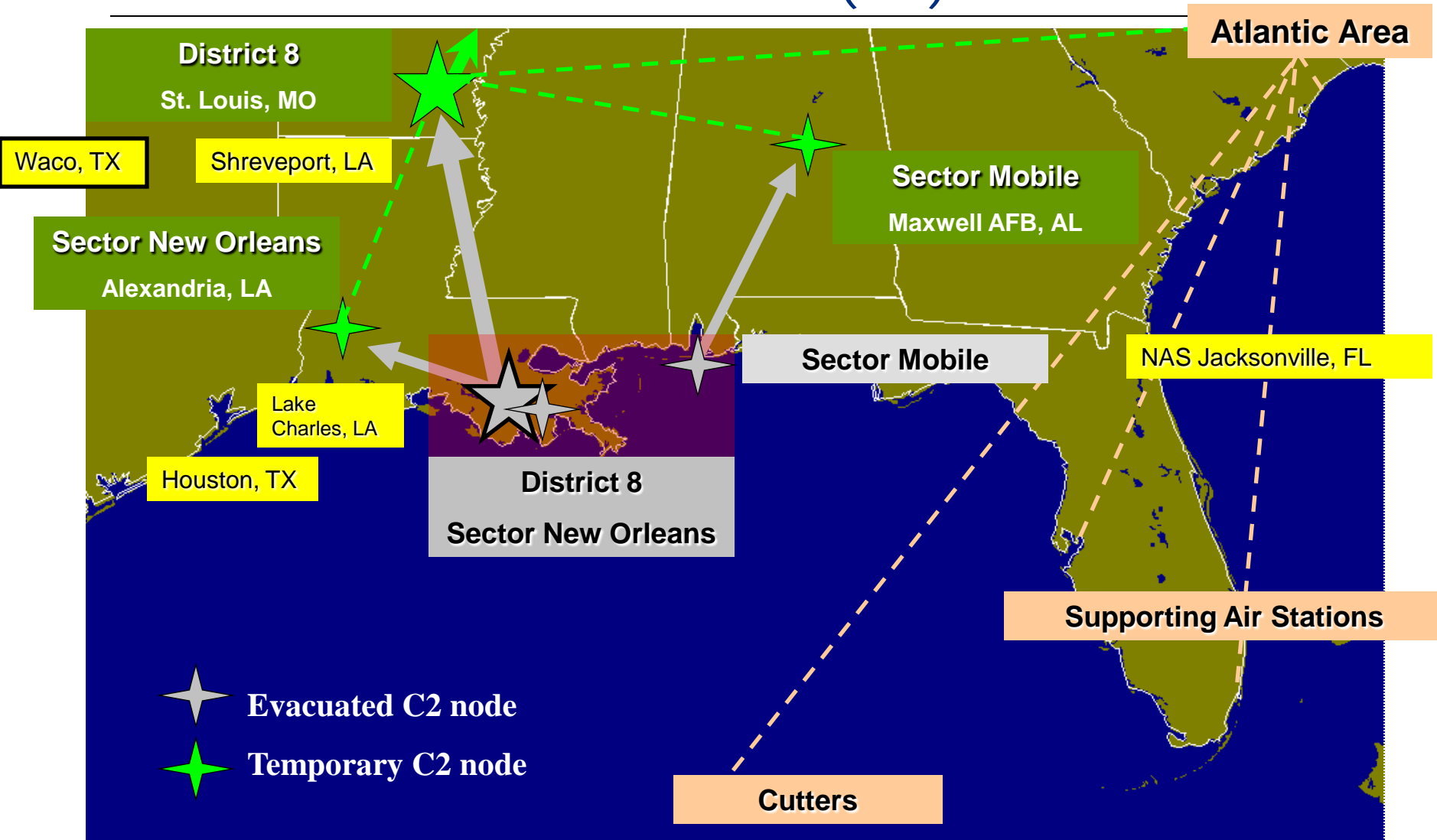


Station Gulfport Post-Katrina





Command and Control (C²)





Federal First Responders

Saving lives in distress first priority

- First rescues made as storm raged
 - Port Sulphur, LA – HH-65 rescued 2 adults, 1 infant from a roof top at 3:05 pm CDT as winds howled at 50-60 knots
- First cutter on scene afternoon of 29 Aug

Surging pre-positioned and out of theater assets



Time tested Search and Rescue system worked



Rescue Operations

L = Landfall

Hurricane Katrina	29-30 Aug L+2hr to L+24hr	31 Aug L+48hr	1 Sep L+72hr (L+3D)	2 Sep L+4D	3 Sep L+5D		Total as of 1600 26 Sep
RESCUED	1,259	1,600	1,141	5,000	6,655		24,135
HOSPITAL EVACUATIONS					9,400		9,409
TOTAL	1,259	2,859	4,000	9,000	26,055		33,544



Hurricane Rita	23 Sep L - 24hr	24 Sep L to L+24hr	25 Sep L+48hr	26 Sep L+72hr (L+3D)	Total
AIR RESCUES	4	96	24	5	137
MEDICAL EVACUATIONS	42	1	6	3	52
TOTAL	46	97	30	16	189



Nationwide Surge Response





All Force Response



	In theater				
Asset	Normal Ops (LA, AL, MS)	Land fall plus 12 hours	Land fall plus 24 hours	Land fall plus 48 hours	Status 9/20
Cutter	16	24	26	26	24
Helicopter	15	28	30	38	8
Fixed-Wing Aviation	4	8	11	14	5
Aux Aviation				13	0
Boats	119	119	119	119	119
Special Teams (DATs & MSSTs)	2	8	8	8	14
Personnel	Assigned D8 – LA, AL, MS	Reserve Surge	Cutters and TAD from other units*		Total
	2,387	572	1,391		4,350**



Initial Situation

- **Waterways Closed**
- **ATON Missing**
- **Vessel & Facility**
Casualties
- **Communications**
- **Security and Public**
Safety





Maritime Recovery and Restoration Task Force





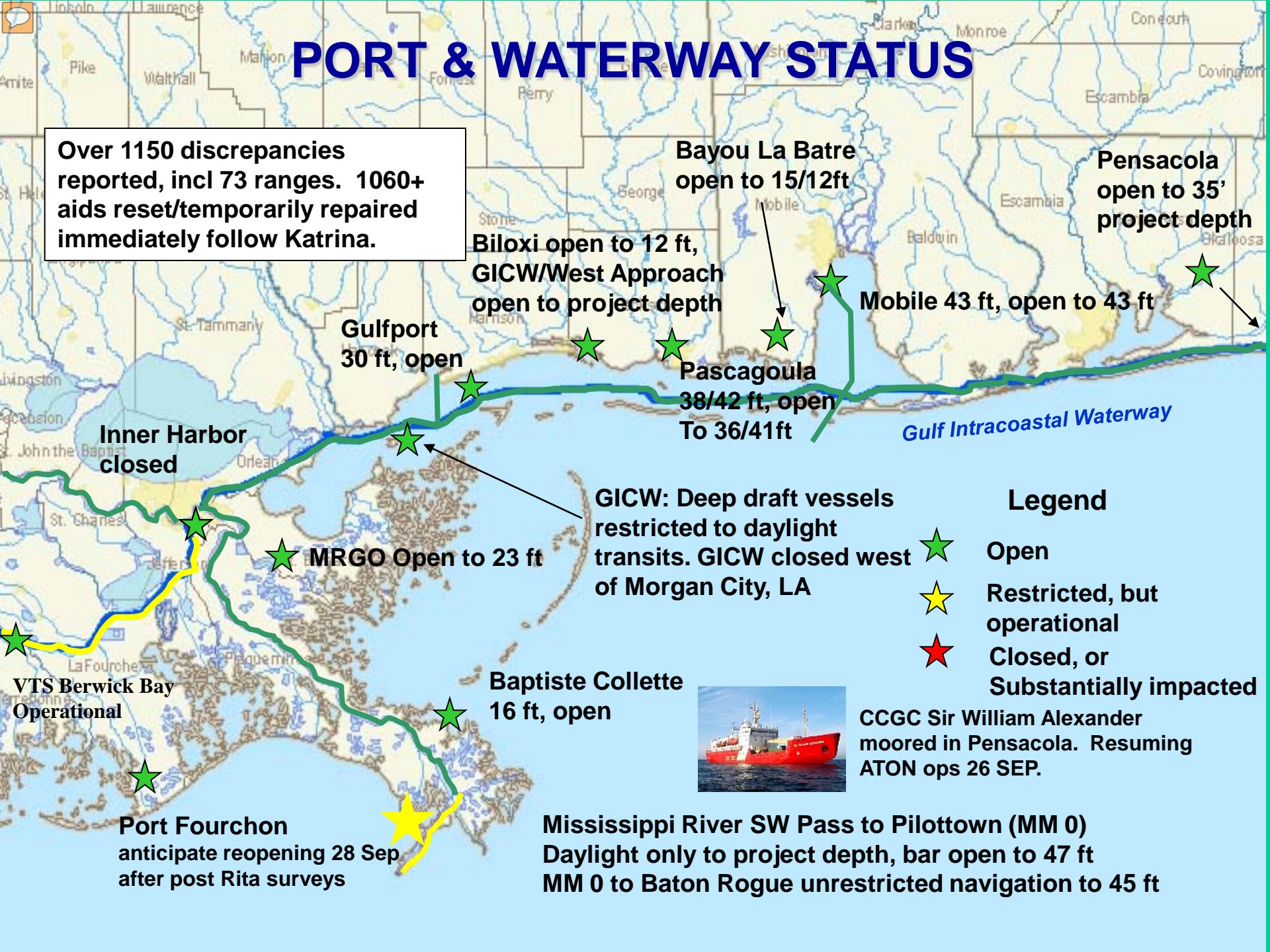
Current Status

- **Port and Waterways**
 - Overview
 - Louisiana
 - Mississippi
 - Alabama
 - Outer Continental Shelf
- **Aids to Navigation**
- **Bridges**
- **Pollution Response**
- **Industry**



PORT & WATERWAY STATUS

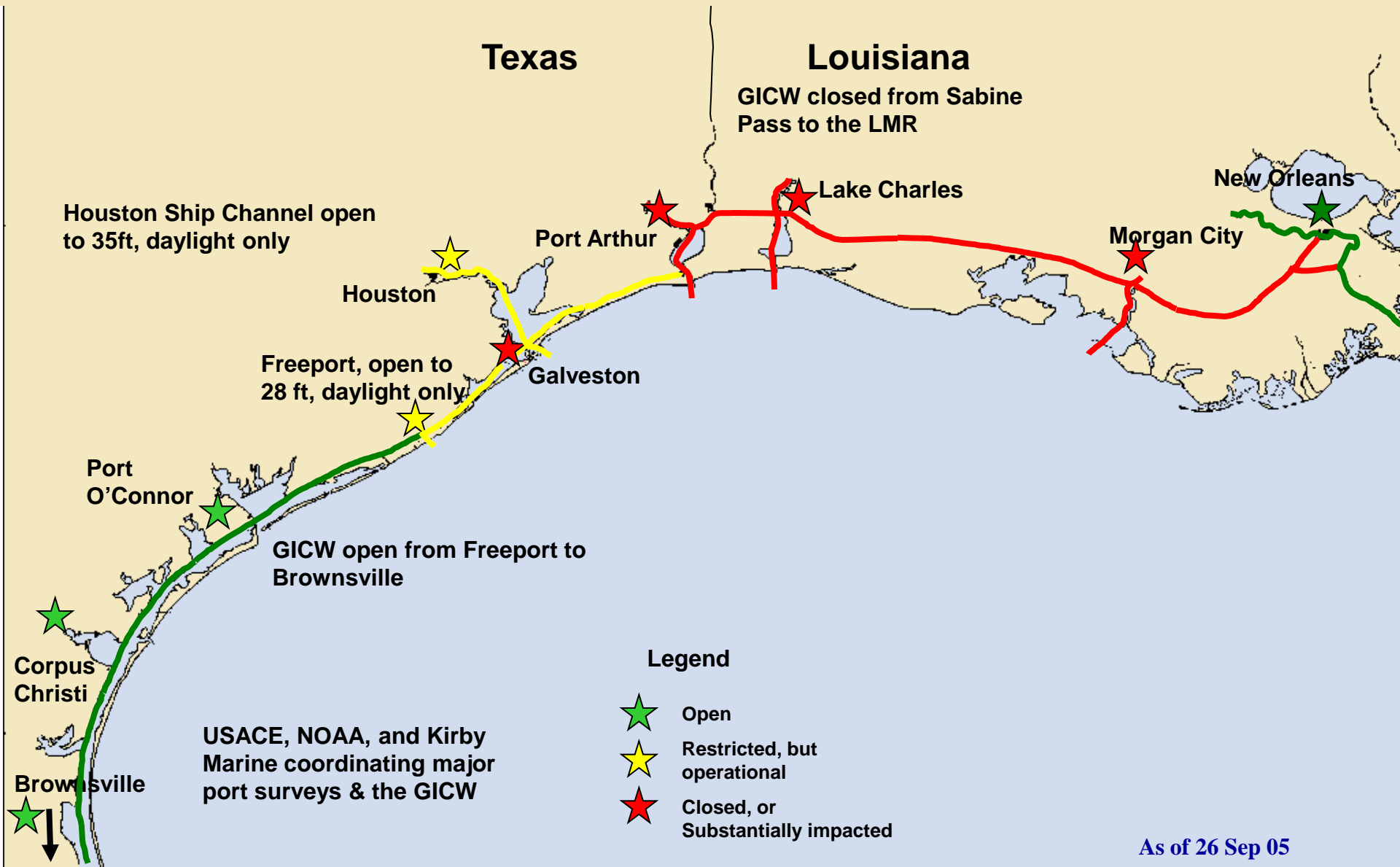
Over 1150 discrepancies reported, incl 73 ranges. 1060+ aids reset/temporarily repaired immediately follow Katrina.





PORT & WATERWAY STATUS

Hurricane Rita





Louisiana as of 27 Sep 2005



AUG 30 2005

**Gulf Intracoastal
Waterway
Safety Zone
established west of
Harvey Lock for
hazards associated
w/ Hurricane Rita**



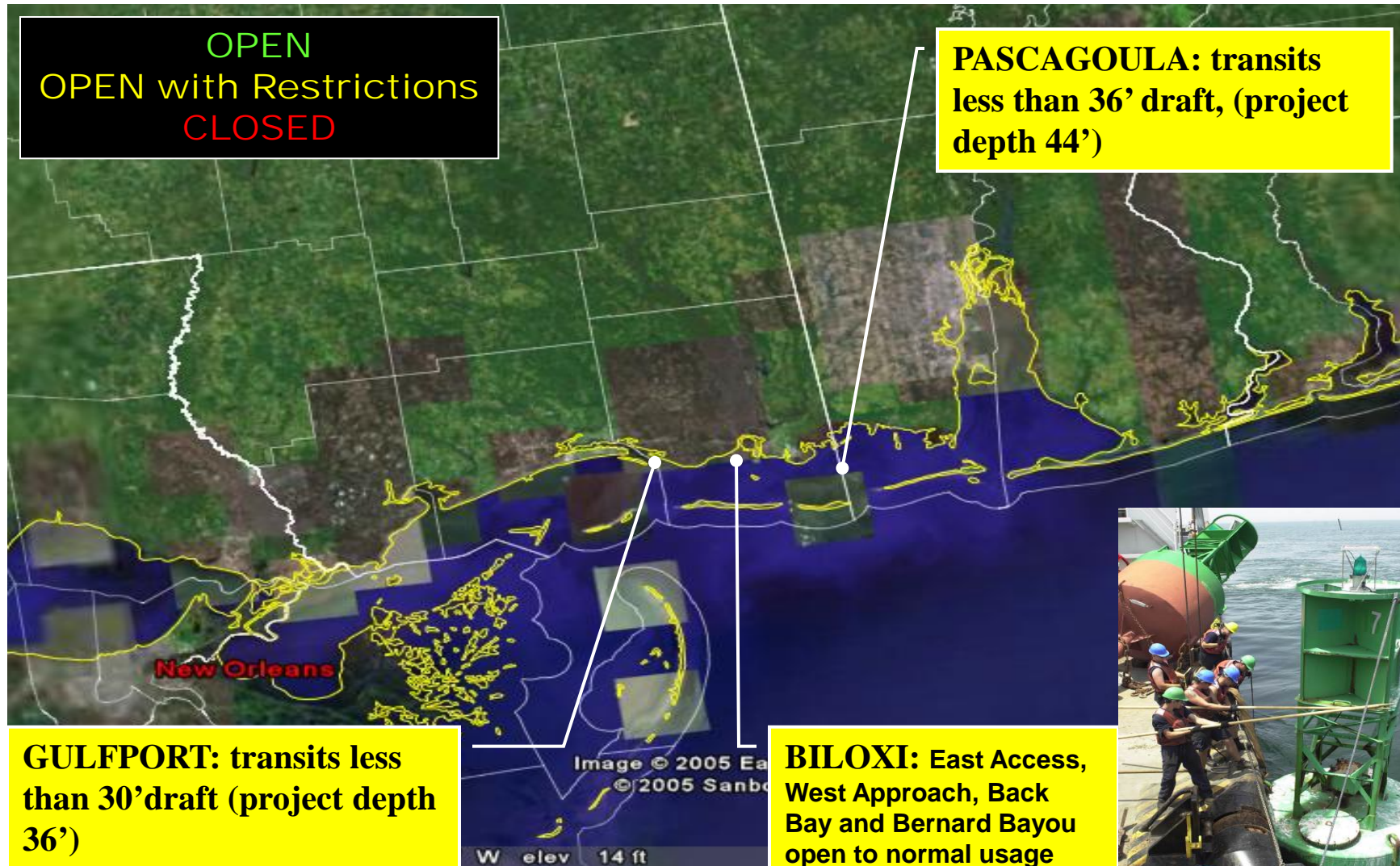
OPEN
OPEN with Restrictions
CLOSED

**LOOP: Personnel aboard for
post Rita restart. Making
deliveries via storage tanks. 7
ships in port.**

**NEW ORLEANS: COTP
Safety Zone from SWP to
MM 0.0. Deep Draft
Vessels Restricted to
Daylight Hrs**



Mississippi as of 27 Sep 2005





Alabama as of 27 Sep 2005



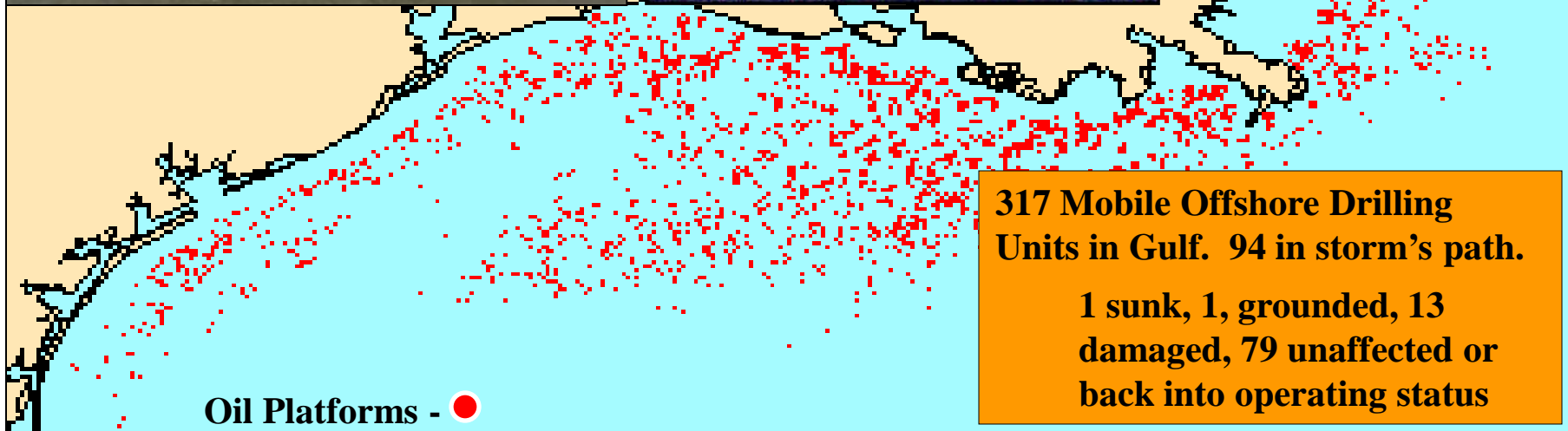


Outer Continental Shelf

2,068 Platforms in Gulf (1,249 unmanned & 819 manned) 46 reported lost / 97 damaged



Dauphin Island, AL



Oil Platforms - ●

**317 Mobile Offshore Drilling
Units in Gulf. 94 in storm's path.**

**1 sunk, 1, grounded, 13
damaged, 79 unaffected or
back into operating status**

Aids to Navigation (ATON) Status



As of 27 September

PASCAGOULA

GULFPORT

**ICW
W of Harvey Lock
(CG/ACOE/NOAA Post Rita
Surveys Underway)**

MORGAN CITY

BAYOU LA BATRE

MOBILE

PENSACOLA

**ICW
E of Harvey Lock**

Mississippi River

ATON Status Update:

Over **1150+** ATON discrepancies were reported, including 73 ranges. **1060+** aids were reset or temp repaired.

Aids on Station

95-100%
51-94%
0-50%

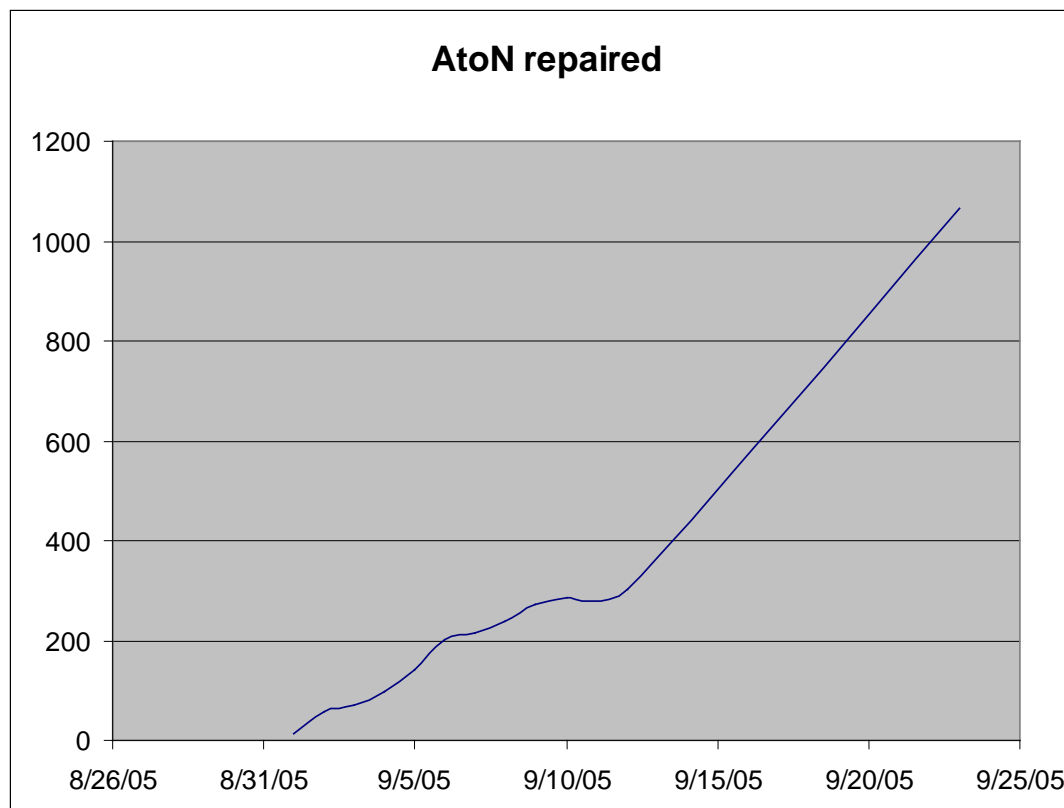


Aids to Navigation (ATON) Status

As of 27 SEP 05

- 1802 federal aids
- Over 1155+ discrepancies identified

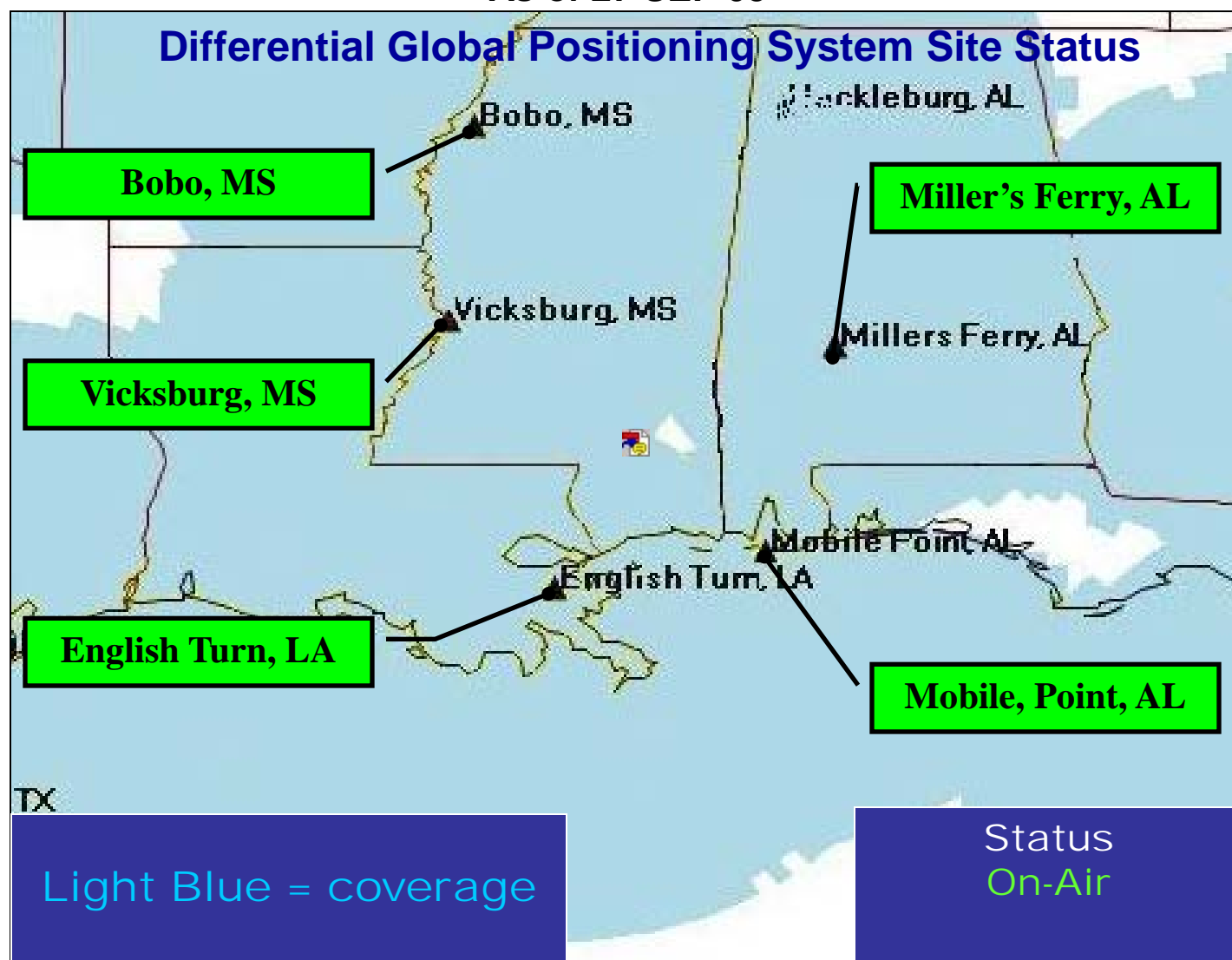
- 01 SEP - Initial AtoN assessment completed
All aids west of Mobile non existent
80 %of aids in Mobile destroyed/missing
- 15 SEP – 532, 50% of aids have been reset or temp repaired.
- 23 SEP – 1069 aids reset or temporarily repaired





Radionavigation Status

As of 27 SEP 05





Pollution Response as of 27 Sep 2005

10 LA Oil Spills Reported by D8 (* 7 Major):

MURPHY OIL *	SUNDOWN EAST
BASS FACILITY *	SUNDOWN WEST
SHELL NAIRN *	SHELL PILOT TOWN *
BASS STATE LEASE 16403*	CHEVRON EMPIRE *
CHEVRON FACILITY AT PORT FOUCHON	DYNEGY VENICE*

Evacuation plans for all facilities were in effect from 22 Sep for Hurricane Rita.

1 Potential Major Hazardous Material Release:

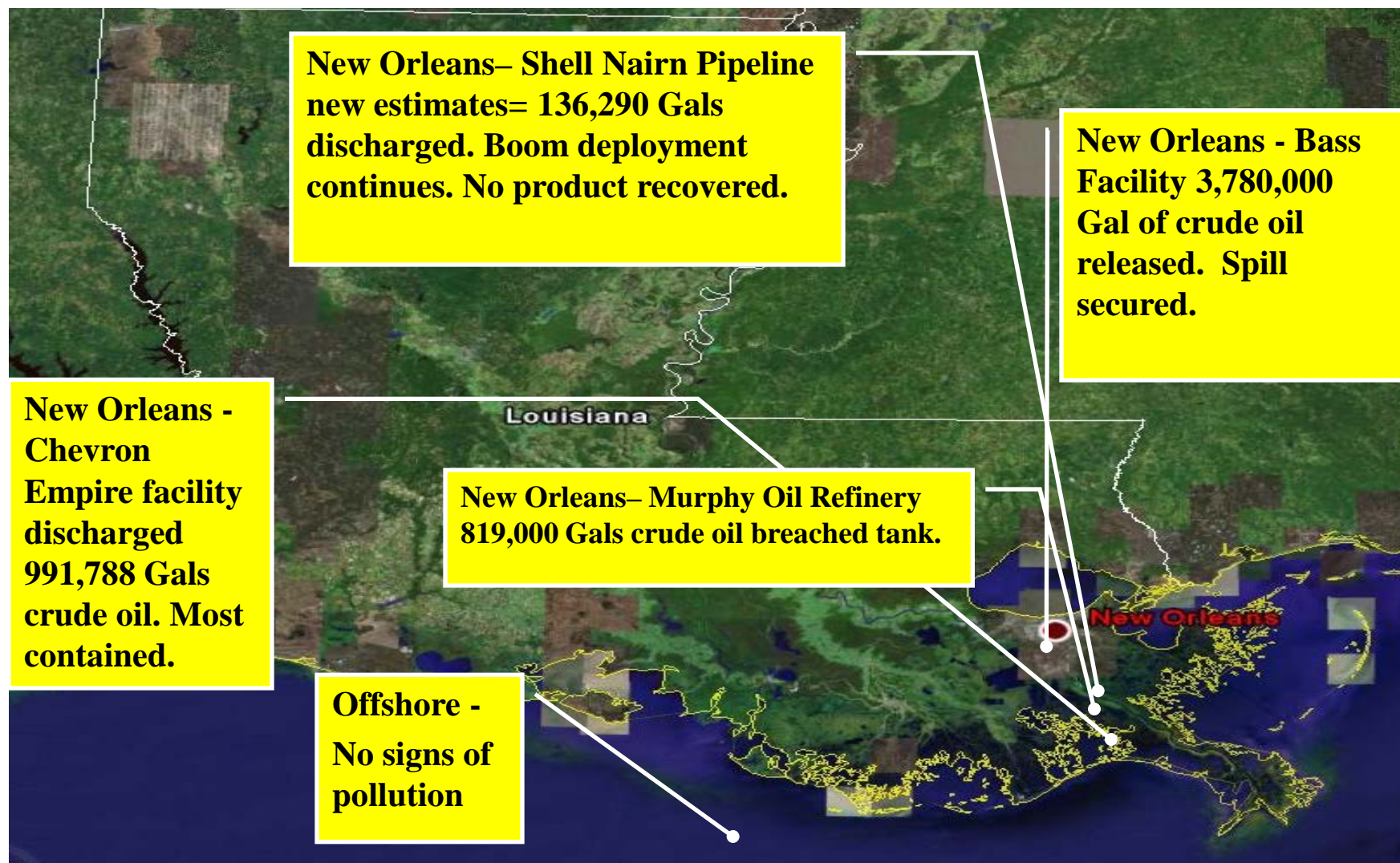
Ershig Fiberglass facility

Recovery operations resuming following passage of Hurricane Rita.



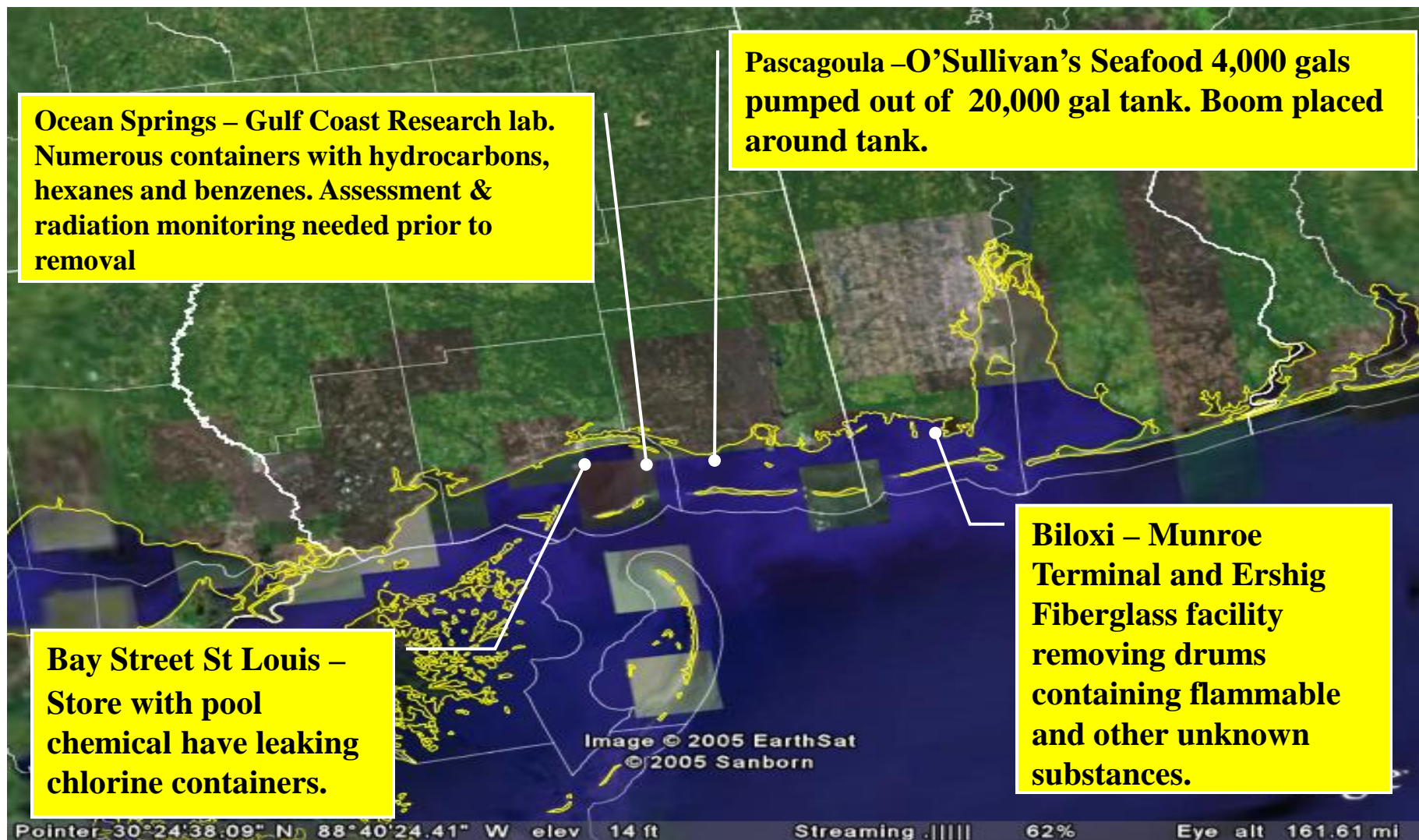


LOUISIANA as of 27 SEP 2005





MISSISSIPPI as of 27 SEP 2005





ALABAMA as of 27 SEP 2005





Sustaining Coast Guard Forces

Surge operations sustainable in short term

Potential adverse impacts to long term readiness

Many assets diverted to Rita response

Peak Number of Forces in Theater

Vessels

- 26 Cutters
- 119 Boats



Air

- 50+ Active Duty air assets
- 13 Auxiliary air assets



Teams from outside region

- Over 40 specialized teams assisting in all aspects of response and recovery





Coast Guard Impacts

- Nationwide deepwater & coastal zone missions impacted (Counter Drug, Alien Migration Interdiction Operations, Living Marine Resources, Aids to Navigation, Ports Waterways & Coastal Security, and Marine Environmental Response)
- At the peak of the surge 37% of all CG aviation assets deployed to region. 1.9M pounds in relief cargo transported to area.
- National CG readiness degraded due to surge...Canadian Forces covered NW Atlantic SAR
- All aviation training was deferred until SAR was complete





Coast Guard Impacts

Loss of Coast Guard Infrastructure

- CG Damage Assessment & Emergency Response teams will complete assessments and help restore local operational capability
- CG suffered substantial loss to existing infrastructure
- Including visual and electronic navigation systems

Station Gulfport, MS



Grand Isle, LA



Air Station New Orleans





Coast Guard Impacts

Personnel

- No personnel unaccounted
- Families evacuated and separated
- 70% of Coast Guard personnel in region lost homes (~1,435 total)

And yet ...

Operations Tempo remains high





Way Forward

Save and Sustain Lives

Restore ports, waterways and infrastructure

Oil, Chemical and Hazardous Material Response

Sustaining Coast Guard Operations





Save and Sustain Lives

Continue supporting FEMA and other Federal, State and Local partners

Use Coast Guard assets and personnel to support all elements of disaster relief





Restore Ports and Waterways

Minimize Economic Impact

RESTORE WATERWAYS

- Buoy Tenders & Aids to Navigation Teams re-marking ports & waterways

ENSURE PORT SECURITY:

- Continuing analysis, enforcement of vessel arrivals, facility security, etc.

INSPECT:

- Ports and Facilities

INVESTIGATE:

- Reported criminal activity
- Inappropriate vessel operations

COORDINATE:

Salvage Operations/Cargo flow with..

- Army Corps of Engineers
- National Oceans & Atmospheric Admin
- US Navy / Dept of Defense – NAVSUPSAL
- Maritime Industry Partners
- Maritime Infrastructure Recovery Task Force





Way Forward – *Oil, Chemical and Hazardous Material Response*

Environmental Response

- Continued response operations
- Environmental assessments and cleanup operations in affected areas





Sustaining Coast Guard Operations

“Backfill” for lost facilities/infrastructure until rebuilt

- **Short-Term** ...use on scene assets for command/control & logistics support (Medium Endurance Cutter served as Vessel Traffic Service, mother ship to small boats, refueling platform to helicopters, etc.)
- **Mid-Term** ...Re-deploy assets as on scene conditions permit
- **Long Term** ...continue CG missions in Gulf region including offshore inspection of arriving merchant vessels & assess/restore/rebuild facilities and infrastructure





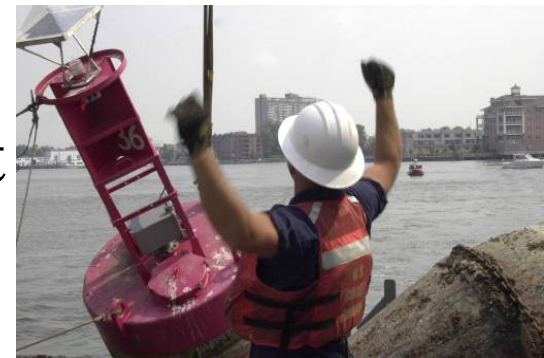
Summary

Maritime response plan (e.g. Search and Rescue system) worked

Command and Control critical to first responder success, including pre-established continuity of operations plans (COOP)

Key challenges:

- **Sustaining current operations**
- **Restoring and reconstituting Coast Guard infrastructure.**



Key CG Success Factors

Military, Multi-Mission Invaluable

- Bridge among DOD, civilian agencies, industry, and communities
- Unique Authorities, Competencies, Capabilities & Partnerships

Coast Guard readiness is a National asset and priority

- Ability to achieve missions directly related to people, equipment, infrastructure, etc.
- Federal/State/Local relationships allow immediate implementation of National Response Plan (ESF-1 Transportation + ESF-10 Oil and Hazardous Materials Response)

Mission focus – Point of service delivery

- Principles of CG Operations – Doctrine
- Unified Chain of Command extending to the tip of spear

Principles of Coast Guard Operations (Pub 1)

Clear Objective

Flexibility

Effective Presence

Managed Risk

Unity of Effort

Restraint

On-Scene Initiative



Questions





Are Major Systems On Target?



Rescue-21

- Public Safety Interoperability
- Survivability
- Recoverability



Deepwater

- It has been a “Deepwater” response
- *Deepwater* will enhance National Readiness and Response



NEW ORLEANS, La. --
The Coast Guard Cutter
Spencer, a 270-foot
medium endurance
cutter homeported in
Boston, MA., sits at
anchor in the
Mississippi near the
heart of downtown
Sept. 1, 2005.



Deepwater Capabilities

HH-65 re-engining (HH-65C)

- Availability of spares limited deployment of HH-65Cs
- HH-65C can carry 280lbs more than HH-65B

Legacy enhancement projects

- Avionics upgrades would allow more effective communications
- C4ISR/COP upgrades would enhance all levels of command/control
- Armed helos could handle SAR/Security needs simultaneously
- EO/IR helo upgrades would produced more effective operations in darkness and heavier weather

Airlift

- Organic ability to move assets/personnel critical to rapid response
- As of 9 Sep, 1.9 million pounds of supplies moved by CG aircraft



ALEXANDRIA, La. (Aug. 29, 2005) - A Coast Guard disaster assistance response team from St. Louis begins unloading relief and response supplies from a Coast Guard C-130 aircraft at Alexandria International Airport here today.



Deepwater Capabilities (cont)

New Assets will enhance all levels of response

- NSC/OPC...
 - Could have landed and serviced DHS/DOD helos (HH-60s)
 - Much more interoperable with surged DOD capability
 - C4ISR/COP delivers MDA far exceeding current capabilities
 - CBR detection and defense would allow operations in contaminated environment
 - Underwater detection capability would aid search/clearing of waterways
- CASA...
 - More capacity to support transport missions (e.g. National Strike Teams)
 - Overhead command, control and communications link
- VUAVs
 - Could have completed surveillance/assessment missions

GULFPORT, Miss. (Sept. 10, 2005) - The Coast Guard Cutter Decisive sits at the battered port here serving as a command, control and communications platform for the recently established Mississippi Coastal Recovery Base Gulfport.





Background





Deepwater New Asset Impacts

Maritime Patrol Aircraft (MPA) aka CASA



- **No CASAs yet delivered to CG**
- **EADS facility in Mobile, AL: Encountered wind damage, missing wall panels; full damage assessment pends.**
- **CG CASA Hangar in Mobile: Design review and groundbreaking expected on schedule**

National Security Cutter (NSC)

- **Pascagoula shipyard physical infrastructure largely intact, with full damage assessment pending**
- **Hundreds of staff continuing clean-up to restore full production operations**
- **First NSC, partially constructed with hull intact, in Pascagoula, MS**
- **NSC 1 full damage assessment and restart of limited construction scheduled for week of Sept 12.**
- **Schedule impact, if any, on NSC 2 still under assessment**





Deepwater New Asset Impacts



Fast Response Cutter (FRC)

- **Physical infrastructure of Gulfport Composite facility largely intact, despite wind damage**
- **Equipment appears to be intact, with full assessment pending**
- **Design facility in Avondale, LA, suffered minimal damage, with final assessment pending**
- **FRC preliminary design review to be conducted in Virginia in September**

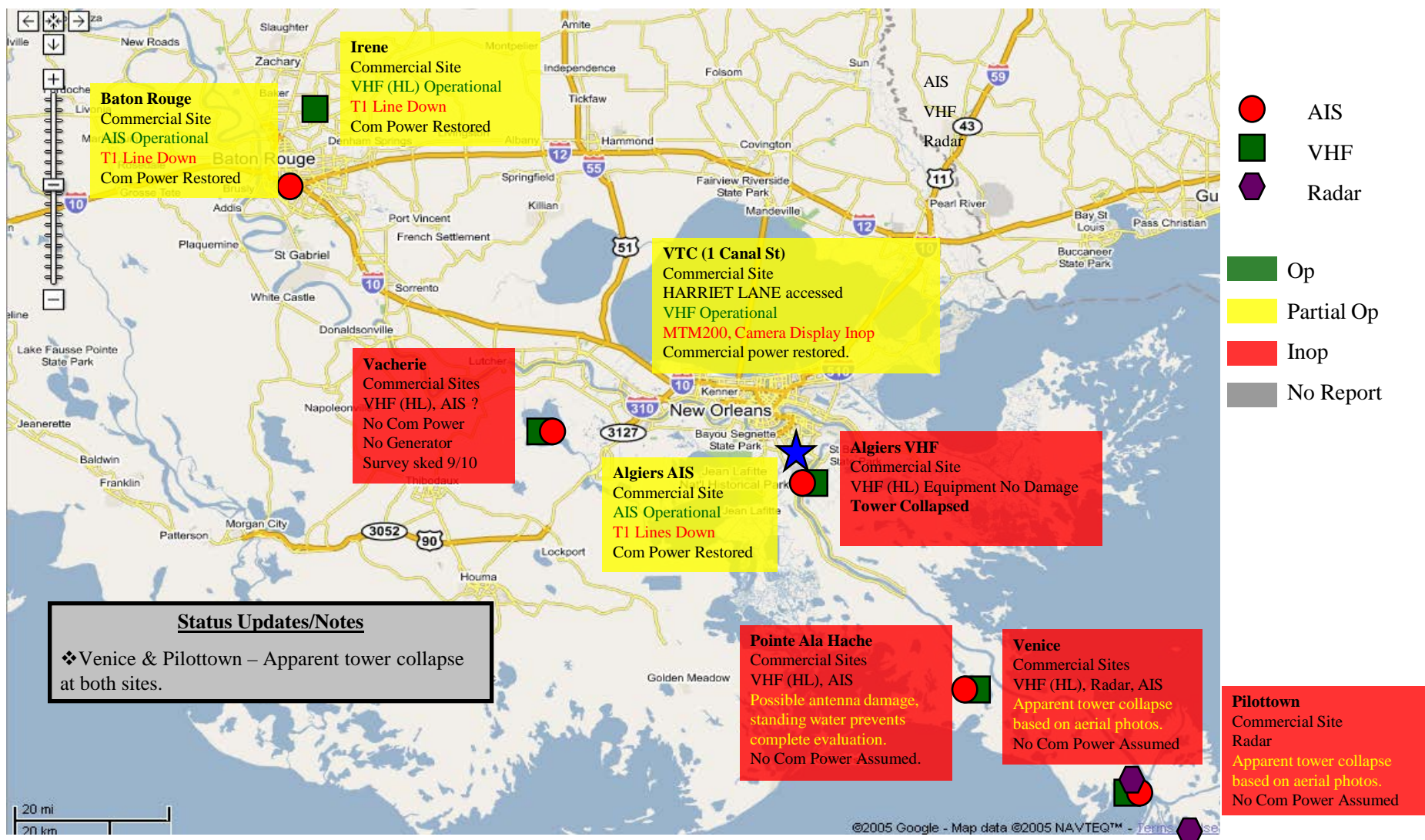
123' Maritime Patrol Boat (WPB)

- **Conversion of final 123, CGC MANITOU, at Bollinger Shipyard in Lockport, LA, likely delayed by Katrina impacts on subcontractors**
- **No damage reported to 123 or PMRO office**
- **CGC MONHEGAN delivery location under negotiation due to inability to conduct sea trials locally**



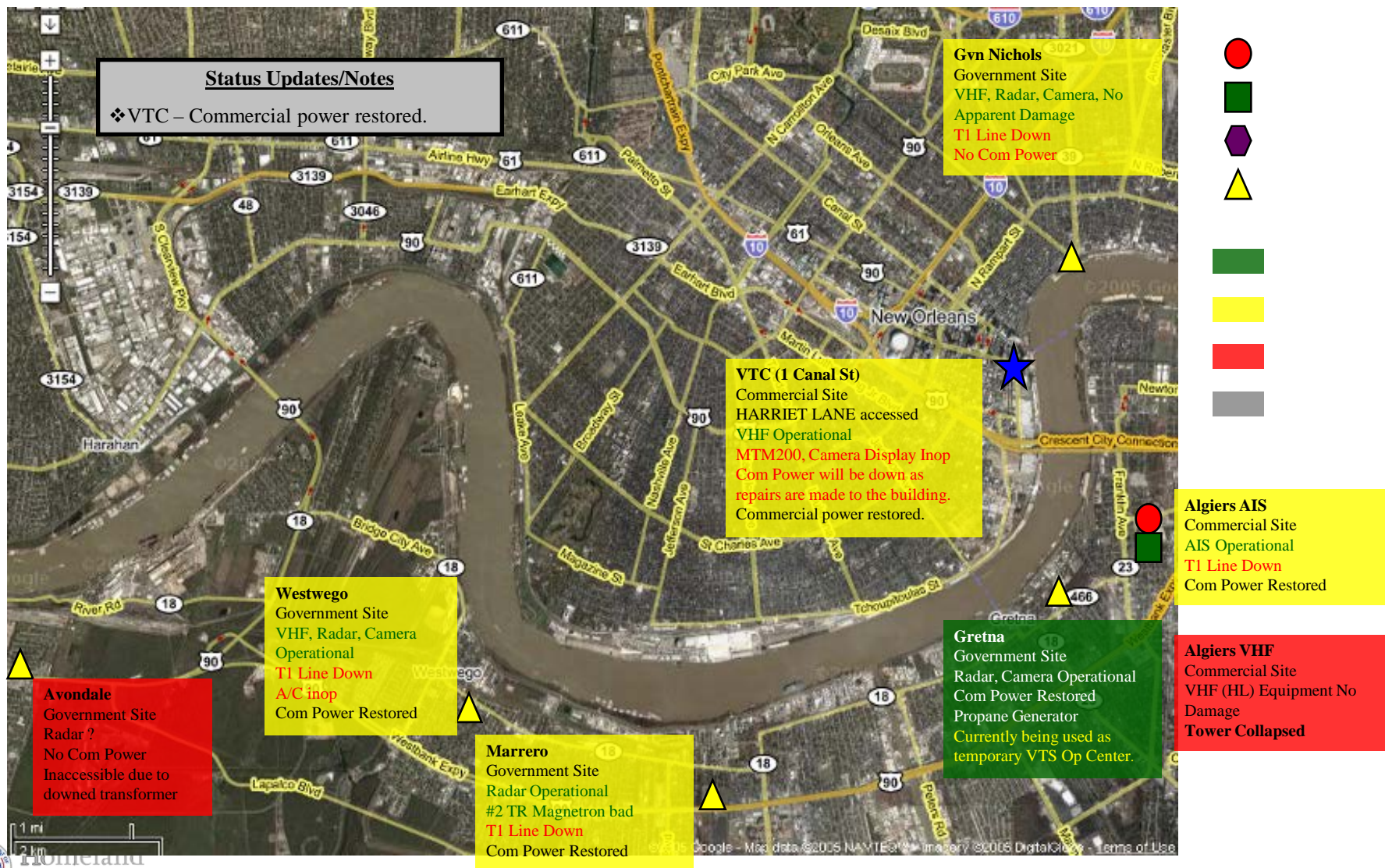


VTS LMR Remote Site Overview





VTS LMR Remote Site Overview





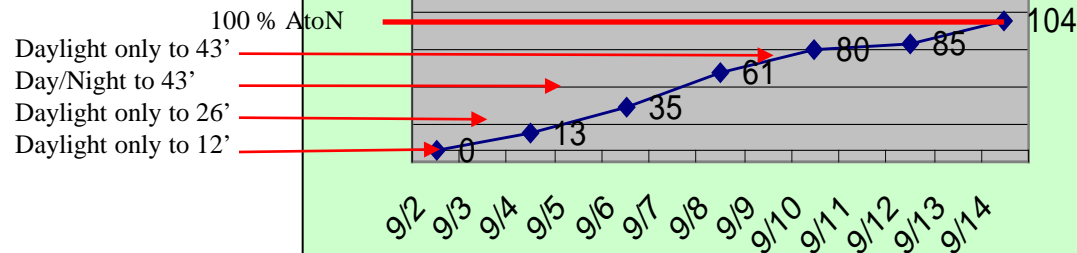
ATON Repairs/Waterway Update – Sector Mobile



COTP Restrictions

PORT OF MOBILE

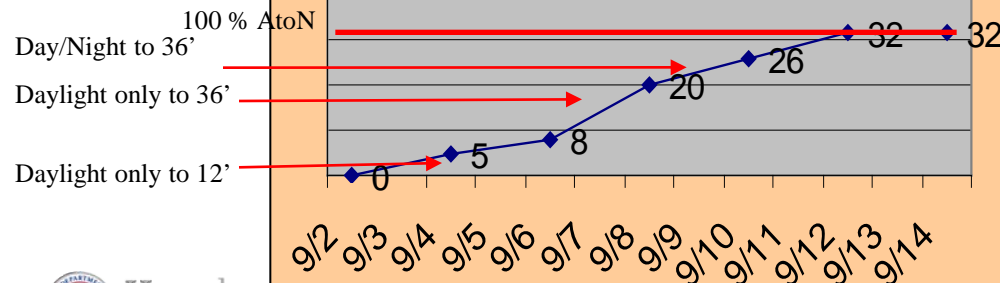
Project depth 45' Outer Bar. Main Channel 43'



- All AtoN set for unrestricted navigation. Open to 43', Mobile River to 40'
- 100+ Discrepancies corrected
- Perm Range work ongoing with D5 Geodetic Survey Team support

PORT OF PASCAGOULA

Project depth 44' outer bar. 36' inner channel.



- All AtoN set for unrestricted navigation. Open to 36', Pascagoula Upper River open to 12', approaches to 41'
- Continuing replacement of temporary aids/ranges with permanent aids/ranges
- USACE developing dredging plan



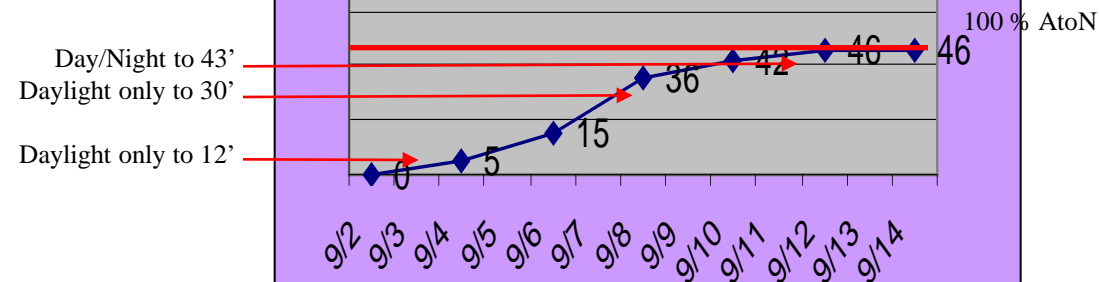
ATON Repairs/Waterway Update – Sector Mobile



COTP Restrictions

PORT OF GULFPORT

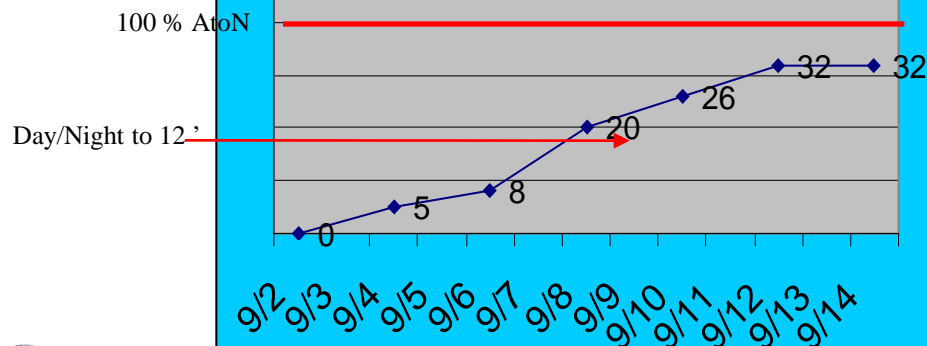
Project depth 36' Ch surveyed at 35'



- Open to 30', Bar Channel to 35'. Surrounding infrastructure not capable of supporting maritime commerce.
- ANTs continuing to replace temporary aids/ranges with permanent aids/ranges
- USACE developing dredging plan

PORT OF BILOXI

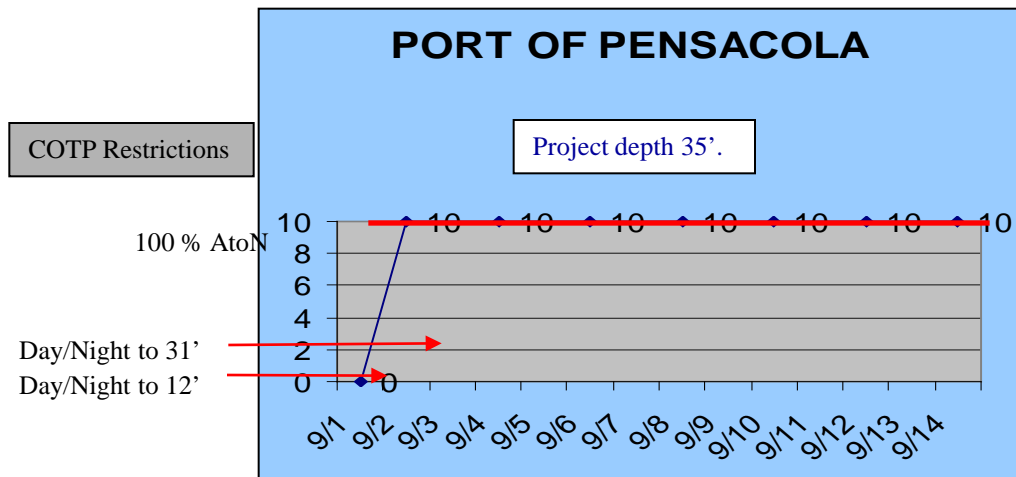
Project depth inner channel 10'. 8' outer channel.



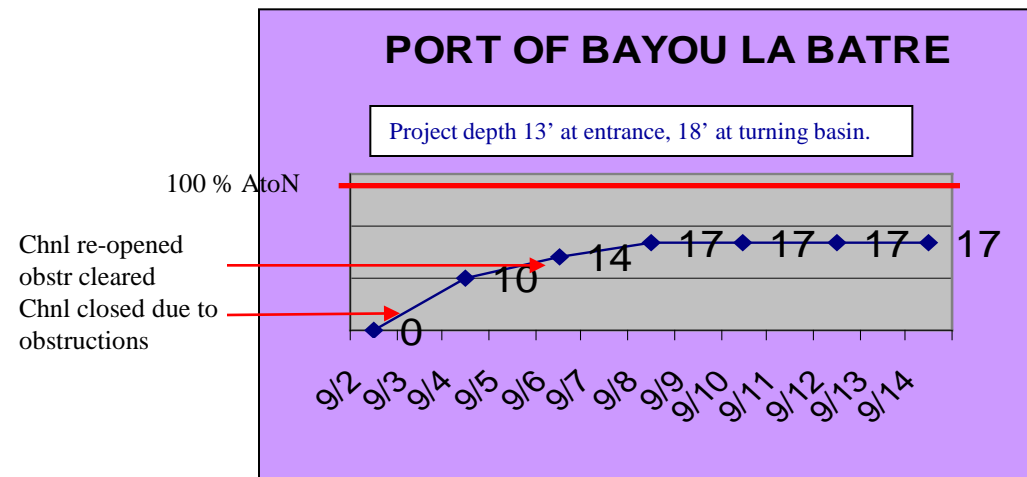
- TRUBs set, East/Back Bay open to 12'
- GICW & West approach at project depth
- 3 sunken vsls remain in waterway - do not obstruct channel
- ANTs continuing to replace temporary aids with permanent aids
- USACE developing dredging plan



ATON Repairs/Waterway Update – Sector Mobile



- Open to 31', NAVSTA to 37'
- All Discrepancies corrected
- Sector Mobile daily 1500cst conference call continues with COTP, USACE, NOAA, Port Auth, Steamship Companies
- USACE developing dredging plan



- Open to 15'
- USACE developing dredging plan



ATON Repairs/Waterway Update – Lower Miss River

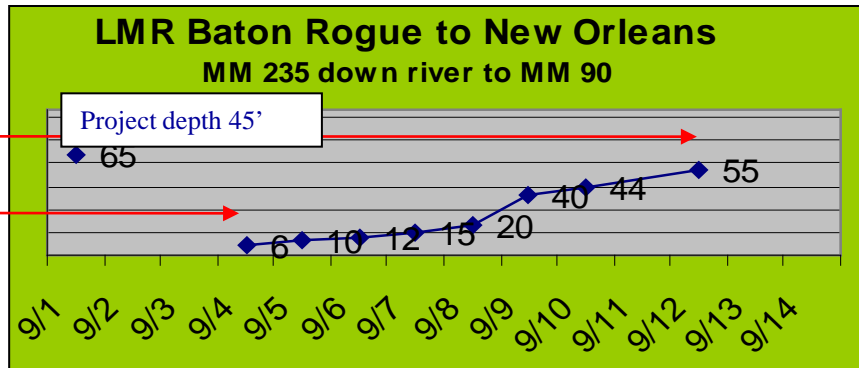


LMR Baton Rouge to New Orleans

MM 235 down river to MM 90

Day/Night to 45'
MM 0 to MM 235

Daylight
only to 39'



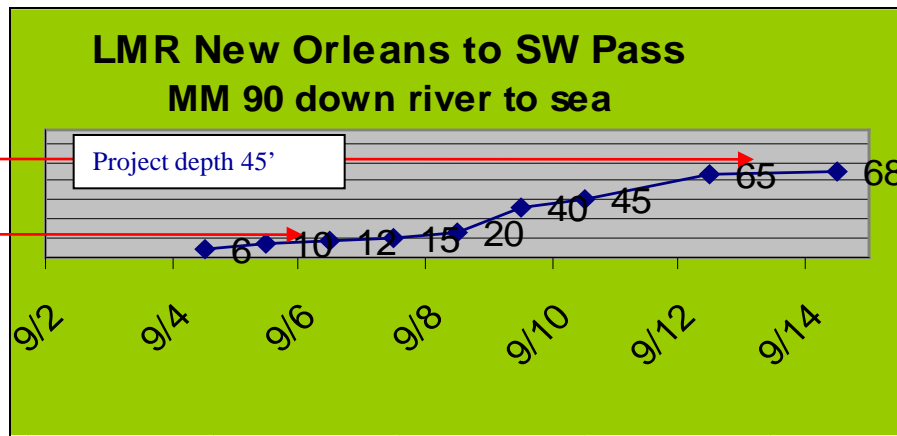
- Ongoing insp/repairs by Cutters/ANTs. No COTP traffic restrictions above MM 0
- VTS NOLA operating with limited capacity at Gretna IVO MM 100
- Mississippi River Gulf Outlet (MRGO) open to 22'.

LMR New Orleans to SW Pass

MM 90 down river to sea

Day/Night to 45'
MM 0 to MM 235

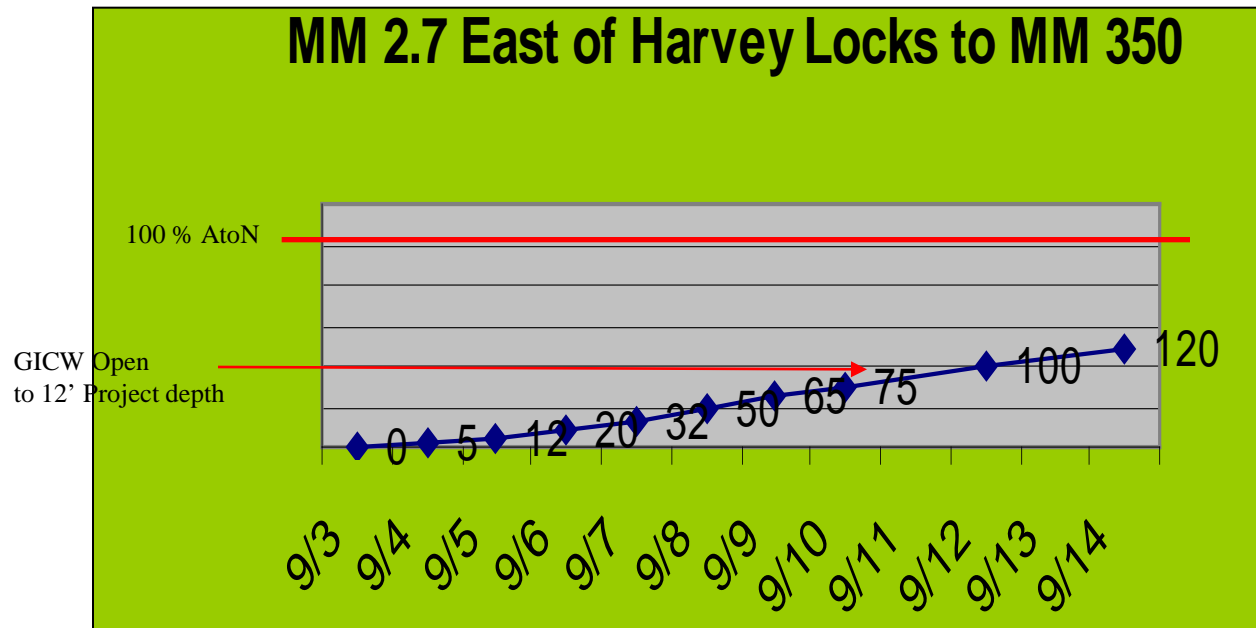
Daylight
only to 39'



- Mississippi River open to unrestricted traffic above Head of Passes (MM 0)
- COTP has established a safety zone south of MM 0, daylight only to 45'
- Repairs to critical South West Pass Entrance Ranges being contracted to jack rig Superior Attitude. 3 WLICs conducting lateral AtoN repair with D8 Geodetic Survey Team.



ATON/Waterway Repairs – GICW

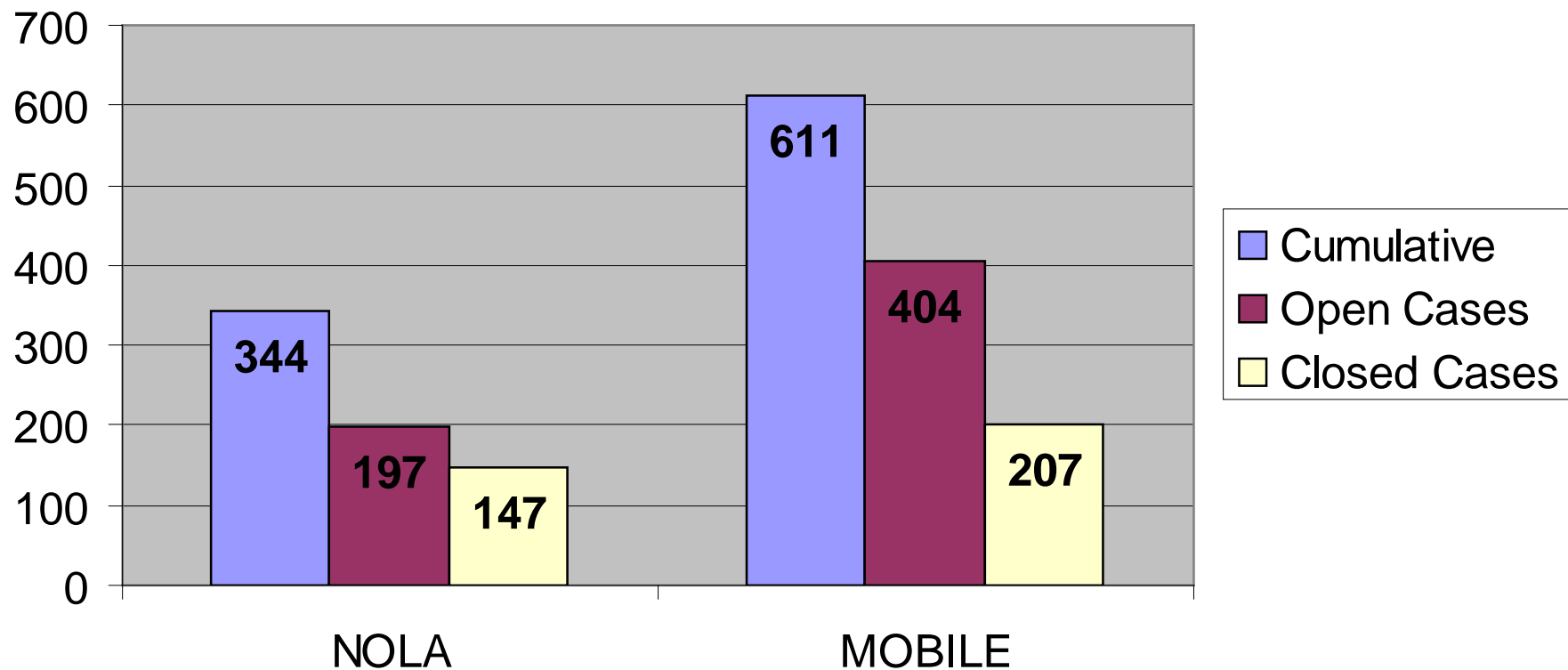


- 100s+ discrepancies reported. Many TRUB/TRLBs set, AtoN range/structure repairs ongoing.
- GICW is open to project depth of 12 feet. High volumes of Tug/Barge traffic reported. Baptiste Collette alt route must still be used.
- VTS Berwick Bay operational and managing Tug/Barge and OSV traffic IVO Morgan City, LA.
- D7 Mobile AtoN Command has completed working areas from Biloxi to Mississippi River Gulf Outlet surveying 437 AtoN.

D8 Pollution Case Status



Pollution Case Status



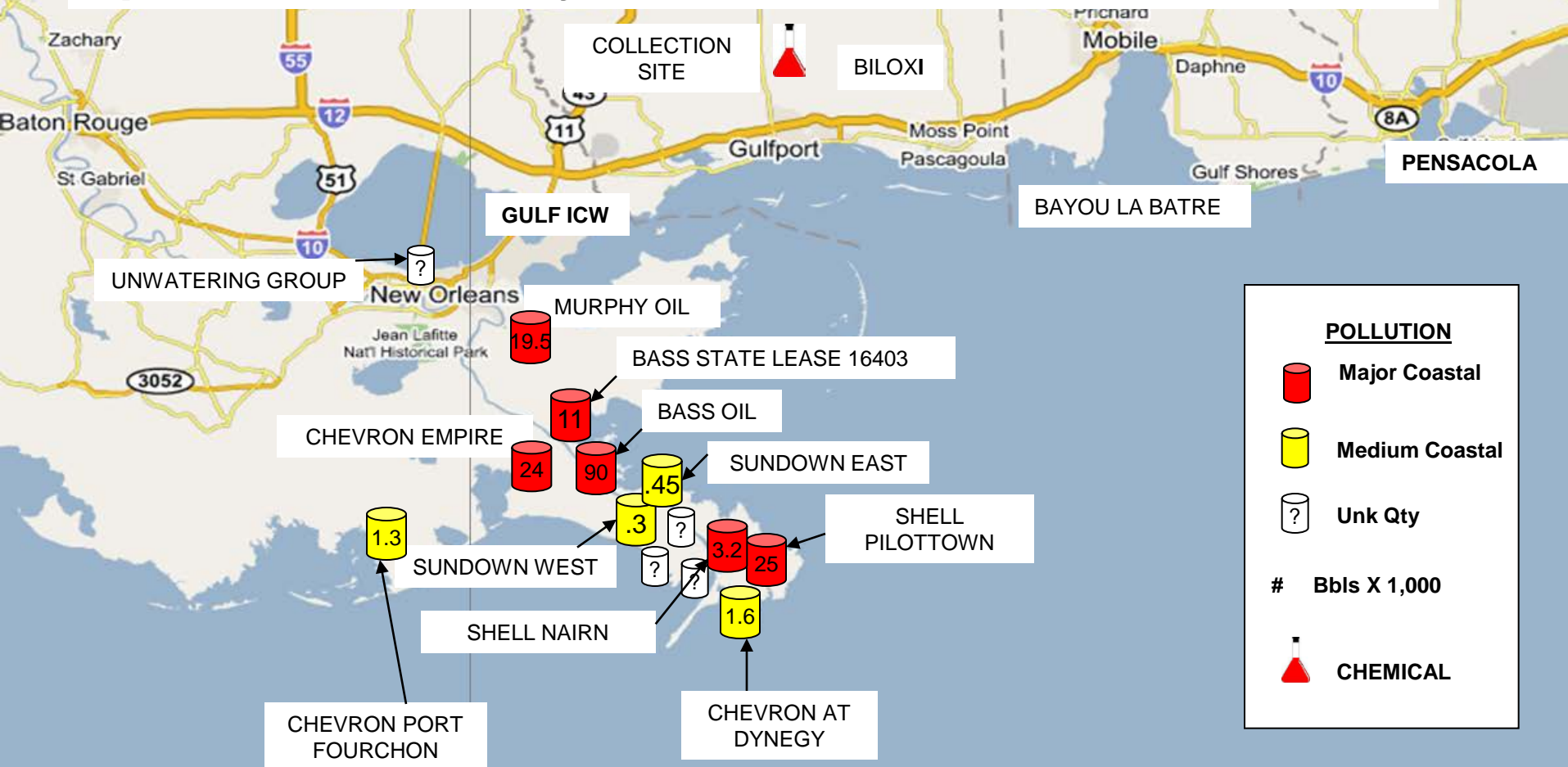


POLLUTION STATUS

U.S. Department of
Homeland Security
**United States
Coast Guard**



***SHELL NAIRN now categorized as a Major Coastal Spill due to industry recalculations**



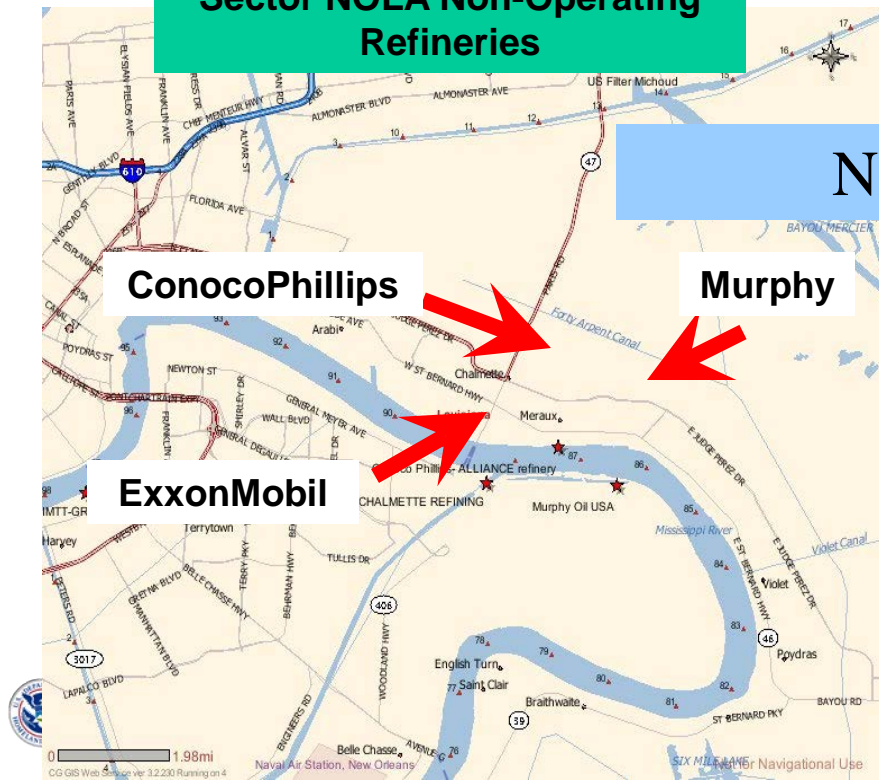
18SEP05 @ 1700

GULF REFINERY STATUS



AOR	Refinery	Location	State	BBLs/Day	Current Status
Sector Mobile	ChevronTexaco*	Pascagoula	MS	325,000	Damage unknown – assessment being made
Sector NOLA	ConocoPhillips*	Belle Chasse	LA	247,000	No power - major damage
Sector NOLA	ExxonMobil	Chalmette	LA	187,200	No power - water damage
Sector NOLA	Murphy	Meraux	LA	120,000	No power – water is starting to recede, currently making assessment of damage, leaking crude oil tank repaired

Sector NOLA Non-Operating Refineries



NNTR

Sector MOBILE Non-Operating Refinery



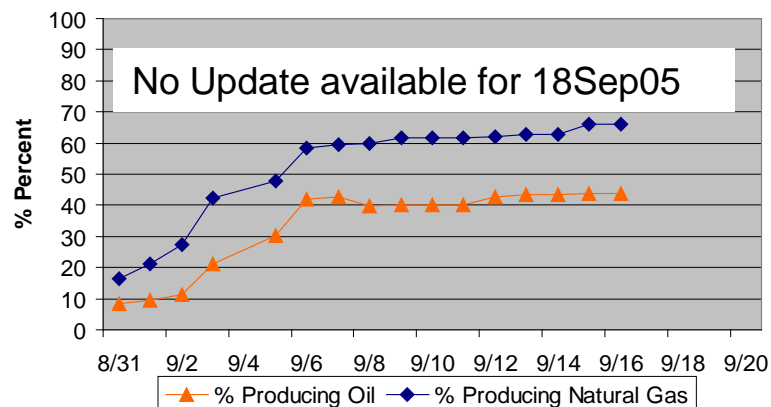
ChevronTexaco



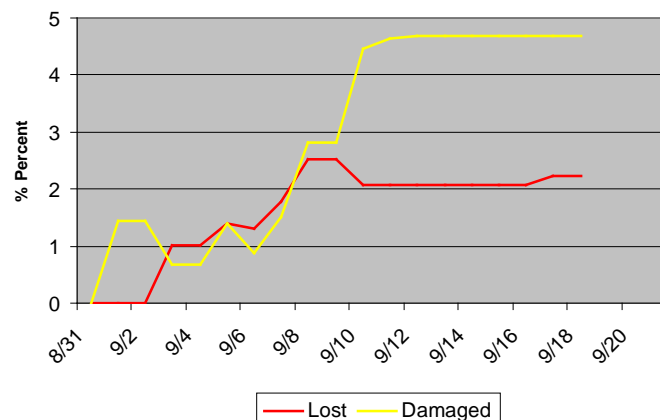
OFFSHORE PRODUCTION STATUS



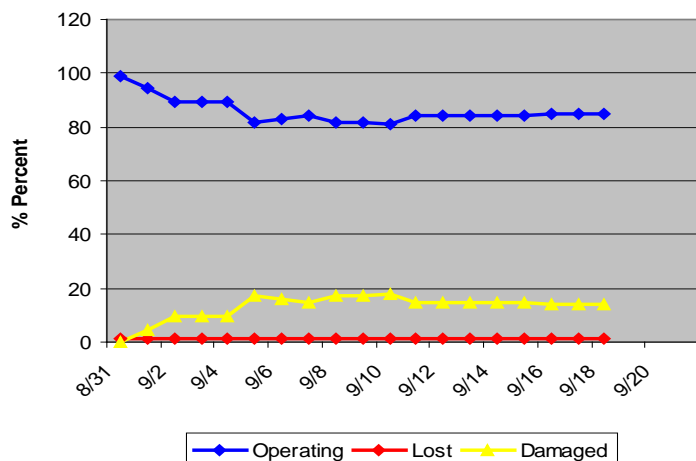
**Oil and Natural Gas Production Status of OCS
Facilities Affected by Katrina**



**Platform Status
(% of 2,068 reported in Katrina's path)**



**MODU Operating Statistics
Based on Pre-Katrina Levels**






MARITIME LAYDOWN

U.S. Department of
Homeland Security
**United States
Coast Guard**



ATTACHED SMALL BOATS

HARRIET LANE	10
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Pelican
I/P Galveston
Vessel H/P



NEW ORLEANS MARITIME LAYDOWN

U.S. Department of
Homeland Security
**United States
Coast Guard**





CG Aircraft Support of Katrina

Assets	7 Sep	8 Sep	9 Sep	14 Sep	16 Sep	18 Sep
C-130	11	11	10	2	1	1
HU-25	4	6	6	5	5	5
HH-60	17	16	12	6	6	3
HH-65	21	21	18	6	6	5
Auxiliary	13	13	13	13	13	13



COAST GUARD AIRCRAFT SUPPORTING KATRINA OPS IN DISTRICT EIGHT

U.S. Department of
Homeland Security
United States
Coast Guard



	HQ	D1	D5	D7	D8	D9	D11	D13	D17	Total
C-130H	0	0	0	1	0	0	0	0	0	1
HH-60J	0	0	0	3	0	0	0	0	0	3
HH-65B	0	0	0	0	5	0	0	0	0	5
HU-25	0	0	0	0	5	0	0	0	0	5
Total	0	0	0	4	10	0	0	0	0	14



Homeland
Security



Industry - Petrochemical

